

Amendments to the Claims

Claim 1 (currently amended): A method for enhancing the efficiency of delivery of a nucleic acid to a cell in vitro, said method comprising

- a) providing to said cell a molecule which causes morphology of a cell to be transfected to change from a stellate morphology to an elongated morphology, said molecule being Tenacin C; and
- b) providing to said cell a nucleic acid encoding a heterologous protein or polypeptide for the transfection of said cell, whereby the presence of said molecule increases the efficiency of delivery of said nucleic acid to said cell when compared to cells transfected in the absence of said molecule.

Claim 2 (cancelled)

Claim 3 (previously amended): The method of claim 1, wherein the nucleic acid encoding said heterologous protein or polypeptide is cloned in a vector which is provided to said cell simultaneously with providing said molecule.

Claim 4 (previously amended): The method of claim 1, wherein said nucleic acid encoding said heterologous protein or polypeptide is cloned in a vector which is provided to said cell prior to providing said molecule.

Claim 5 (previously amended): The method of claim 1, wherein said nucleic acid encoding said heterologous protein or polypeptide is cloned in a vector which is provided to said cell after providing said molecule.

Claims 6-26 (cancelled)

Claim 27 (previously amended): A composition for enhancing the efficiency of delivery of a nucleic acid to a cell, said

composition comprising

a) tenascin C which causes the morphology of a cell to change from a stellate morphology to an elongated morphology; and

b) a nucleic acid encoding a heterologous protein or polypeptide for the transfection of said cell.

Claim 28 (previously amended): The composition of claim 27, wherein said nucleic acid encoding said heterologous protein or polypeptide is cloned into a vector which is selected from the group consisting of a plasmid vector, a viral vector and a linearized nucleic acid.

Claims 29-32 (cancelled)

Claim 33 (previously amended): A kit for enhancing the efficiency of delivery of a nucleic acid to a cell, said kit comprising

a) an instructional material;

b) tenascin C which causes morphology of a cell to change from a stellate morphology to an elongated morphology; and

c) a nucleic acid encoding a heterologous protein or polypeptide for transfection into said cell.

Claim 34 (previously presented): The composition of claim 27, wherein said cell is a vascular smooth muscle cell.

Claim 35 (previously presented): The composition of claim 27, further comprising a vehicle that is suitable for pharmaceutical delivery.

Claim 36 (previously presented): The composition of claim 35, wherein said vehicle is a liposome forming lipid.

Claim 37 (currently amended): The composition according to claim 27, further comprising a polymeric carrier that permits controlled release of said molecule, said polymeric carrier being selected from the group consisting of controlled release film, nanoparticle, and microparticle.

Claim 38 (cancelled)

Claim 39 (cancelled)